

Coates (B. H.)

A

## BIOGRAPHICAL SKETCH

OF THE LATE

### THOMAS SAY, ESQ.

READ BEFORE THE

### ACADEMY OF NATURAL SCIENCES

OF

PHILADELPHIA,

(B. H.)

December 16, 1834.

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BY BENJAMIN H. COATES, M. D.

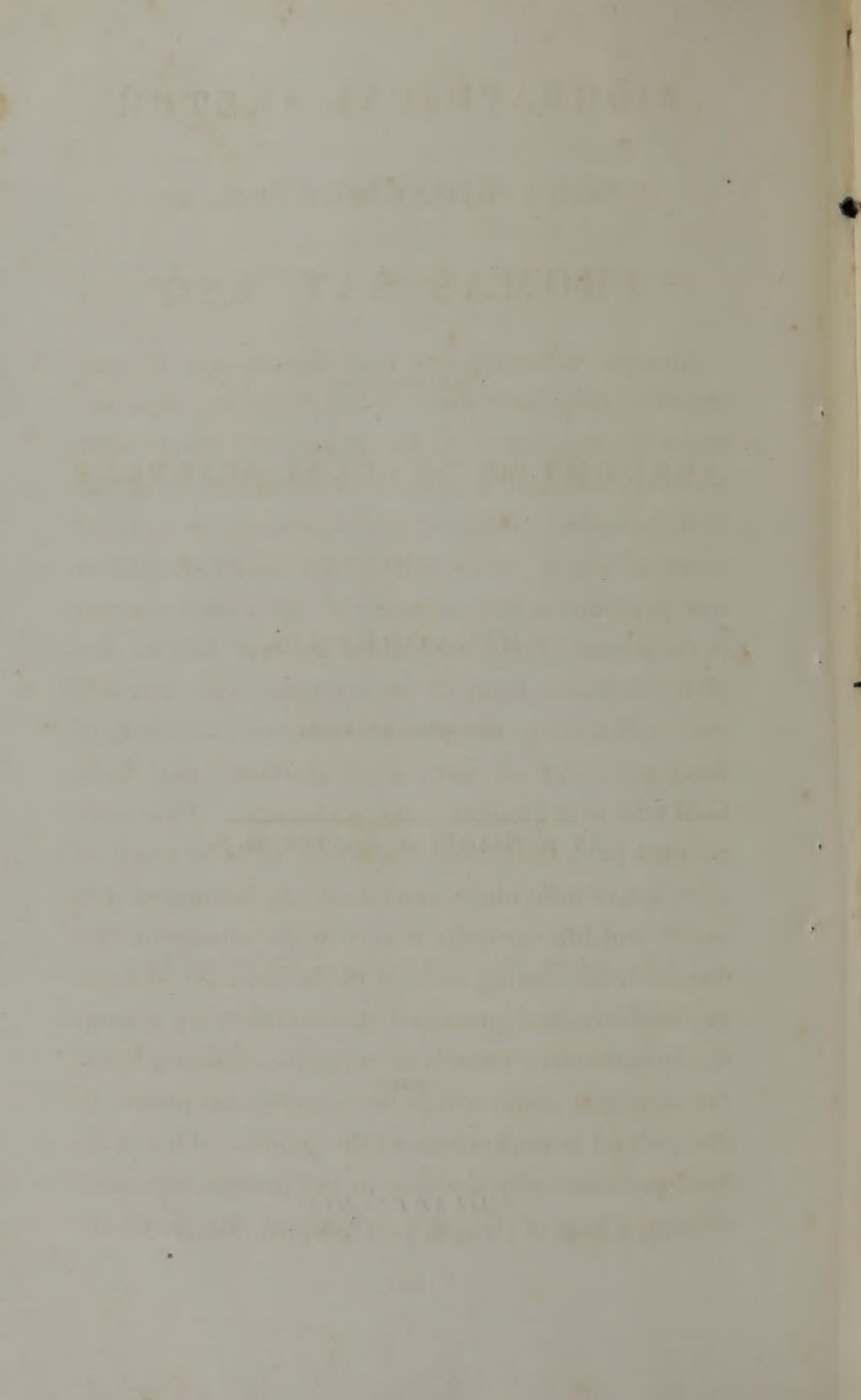
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1835.



## BIOGRAPHICAL SKETCH, &c.

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DURING the twenty-two years which have elapsed since the first institution of the Academy, it is remarkable that our body has never, till the present occasion, been called upon to lament the death of one of its founders. That which, according to the usual course of human events, might have been expected to take precedence in the order of time, has occurred in the second place ; and while we have had to deplore the loss of many of the brightest ornaments and most useful labourers of our association, the shaft of death has never till now, alighted among that little band who first brought it into existence. The body which I have the honour to address, owes its origin to a few active individuals ; and while the feelings of private friendship naturally revert to the virtues of the deceased, the having assisted in the creation of such an Academy, and promoted its usefulness by a long, steady and active course of scientific labours, forms the strongest claim which his memory can possess to the grateful reminiscences of the public. This is indeed pre-eminently the case in the present instance ; so large a mass of the early writings of Mr. Say hav-

ing been published in the Journal of the Institution as in a great measure to identify him with it. The same efforts by which our departed fellow member raised the reputation and extended the usefulness of the body to which he belonged, formed the foundation of his own ; and it is perhaps not employing too strong a phrase, to allege, that the scholar and his infant association found their way to fame together.

The family of our deceased fellow member had been settled in Pennsylvania from the time of its first colonization. His ancestors by the father's side are understood to have been Huguenots, who emigrated to England in pursuit of religious liberty : and his lineal predecessor, in the fourth degree of proximity, came from England with William Penn, accompanied by others of his family. The integrity and activity of these high principled and determined men, were rewarded by a liberal share of the divine blessing upon the external circumstances which surrounded them. They and their descendants generally lived to an extreme age, surrounded by peace and abundance, and enjoying the confidence and respect of their fellow citizens within the colony. His grandfather, Thomas Say, was a very patriarchal man. Educated in the Episcopal church, by his step-father Paschall and his uncle Robinson, he was united, early in the eighteenth century, to the religious society of Friends. While in that connection, his personal conduct and character were such as to acquire for him a high es-

timation among his friends and acquaintance. The confidence reposed in him was exemplified by his being frequently employed in the care of the estates of deceased persons, and in the guardianship of orphans; both of which trusts he conducted to great satisfaction, retaining, long after, the friendship of the parties he had served. It was also exhibited in the respect paid to his religious character; although, as appears by a memoir of his life, published by his son, he differed from the religious association with which he was connected in certain doctrinal principles, inclining strongly to universalism. Dr. Benjamin Say, the immediate progenitor of the subject of these notes, was long known in this city as a skilful and benevolent practitioner of medicine, and enjoyed in that capacity a large share of public confidence and patronage. Having been connected with military proceedings during the war of independence, he joined that seceding portion of the society of Friends, known by the name of Free Quakers.

The immediate subject of our memoir was born July 27th, 1787, and was the eldest son of Dr. Benjamin Say and Anna, his first wife, a daughter of Benjamin Bonsall, Esq. of Kingsessing. In his early youth he was brought up in rigid compliance with many of the peculiar observances of the society of Friends or Quakers. He received a considerable part of his education at their school at West town, in Pennsylvania; and the remainder of it generally at

the institutions of that religious body. He manifested, at this period, a remarkable docility of temper, a profound and confiding respect for his parents and teachers, and a great fondness for study. He pursued, by his own choice, an extended course of reading among the writers of his own language ; having compiled, at one time, a large volume of poetical extracts, arranged alphabetically. These latter pursuits, however, were not well suited to the bias of his mind ; and he soon forsook poetry altogether, devoting himself exclusively to the accumulation of fact or natural truth.

At an early period of his life, a near family connection with the celebrated naturalist, William Bartram, of Kingsessing, induced the young Say, together with several of his acquaintance, to devote a considerable amount of time to collecting objects of natural history for their venerable friend's museum. This occurrence seems to have fixed his destiny : the student, young as he was, felt himself at once in his proper sphere. He immediately commenced the study of natural history ; a pursuit which, though occasionally suffering a temporary interruption, was never wholly laid aside for the remainder of his life. The natural gaiety of youth, the attractions of fashion, the multiform allurements which surround a young man of easy fortune, and even the serious claims of a commercial establishment, were all capable of occupying his mind but for a short season, to be soon su-

perseded by those boundless cravings for knowledge which an Almighty Power had placed within his breast. In the most elated moments of youthful excitement, he would abruptly relinquish the occupation in which he was engaged, if an opportunity occurred for enriching his collections with an insect; and when, at a subsequent day, in compliance with the earnest wishes of his father, he entered into commercial engagements, the future naturalist was found by his friends occupied with those pursuits for which nature had designed him, and leaving the details of business to others. The commercial efforts proved unsuccessful; and Mr. Say, deprived of his patrimony, instead of endeavouring to repair the loss, resolved to devote himself exclusively to natural history. From this may be dated the commencement of his purely scientific career: he now began to consider science as a profession. As has so frequently been the case in the lives of learned men, the loss of worldly prosperity seemed the road to higher intellectual distinction and more enlarged usefulness.

The studies of the youthful naturalist, about this period, underwent a temporary interruption, from his service as a volunteer in the last war between our country and England. In common with several of his friends and relations, he became a member of the first troop of city cavalry, and in that capacity proceeded to Mount Bull; where he remained for some time during the years 1812 and 1813. The break-

ing up of this military post, however, soon left him at liberty to return to the pursuits for which he felt so strong an attachment.

In pursuance of his recent determination, he had already devoted considerable labour to the study of natural history, and the collection of the natural productions of our country, when he found the arena of his usefulness suddenly extended by the formation of this Academy. When, on the 25th of January, 1812, the little association which had previously employed itself in pursuits of a more private character, agreed to assume the style and character of our present institution, it was considered of importance that Thomas Say, though absent from the meeting, should be assumed as an original member. The compliment thus paid to a modest and retiring man, shows, as was intended, the value which was then set upon his adhesion by the six others who thus associated him to their number. How amply his subsequent course justified their selection, all the volumes of the Journal, and all the foreign correspondence of the Academy can abundantly testify. He came among them a disciplined naturalist. Such was the effect of private study, that his subsequent acquaintance had no opportunity of witnessing the infancy of his scientific powers. His elementary knowledge was complete; his acquaintance with classification adequate, and his power of observing and discriminating, accurate and ready.

He was at once prepared for the difficult and laborious task of describing and cataloguing American productions in natural history. He was fully fitted at all points for academic usefulness.

In the tasks undertaken by Mr. Say, either separately or with his colleagues, almost every thing was to be done. The study of the invertebral animals was to be introduced to the notice of our citizens. A taste for natural history was to be created and diffused. The departments of botany and ornithology, almost the only ones which then received a share of attention in Philadelphia—the one almost confined to the elementary pursuits of a few students of medicine, or young people from schools, ambitious of a more liberal education than they then received; the other, to the curious and admiring readers of Wilson, were to be furnished with a rallying point; and the popular attention was to be at the same time directed to the various other branches. It was not that the studies selected by Mr. Say, then incomplete, were to be further extended: the studies were to be created, and the students induced to prosecute them.

For these purposes, his efforts were truly unremitting. Besides the very large amount of his writings for the Journal, he was attentive and regular in his presence at the meetings; and during the intervals may be said to have been always at his post at the academy. Those who were then in the habit

of visiting the building, will abundantly recollect the uniformity with which he was to be found there. Others might attend more or less, as service on committees, leisure, or the wish to pursue particular inquiries might demand or render convenient; but Mr. Say was always added to the number, always employed in the one unremitting, untiring, unmodified pursuit, the study of natural history. The value of such assiduous attendance, by such a man, may be easily imagined. Those who were disposed to visit the establishment, were at all times certain of agreeable society; for Mr. Say was ever attentive to all reasonable calls for conversation, so much so as even to surprise his friends. The books and specimens were, through his means, of ready access, while at the same time, his presence was a check upon confusion, loss and disorder. His uniform attendance operated as a powerful encouragement to the practice of studying within the walls of the institution.

This indefatigable and eminent naturalist was at all times ready to bestow the fruits of his own researches upon those of his friends who felt an interest in similar pursuits. In this manner he was incalculably serviceable to young students in natural history, by his advice and assistance; feeling far more anxious to extend the sphere of science in his country, than to increase his own fame. This generosity in bestowing upon others the results of his own industry, so highly

characteristic of true genius and real love for science, might perhaps be referred, in part, to a sense of his own strength. He had reputation to spare, and could hardly avoid feeling aware, that the inquirer who grew in science must inevitably form a higher estimate of the teacher of whose merits he thus became a better judge. The effect of Mr. Say's liberality of disposition, with his amenity of manner, was peculiarly fascinating, and tended forcibly to produce, in the same individuals, a combined feeling of love for the science, and for the naturalist who had thus gained their affections.

In May, 1817, the publication of the Journal was commenced, and Mr. Say continued, during the next ten years, to be one of its steadiest and most laborious contributors. Whatever contingencies might take place in regard to the services of others, his assistance, personally, when in the city, and at all times by the labours of his pen, was never wanting. In the autumn of that year, the expedition to Florida was organized, for the purpose of procuring objects of natural history. The party consisted of Messrs. MacLure, Ord, Say and Peale; who spent the winter in that country, and collected a large number of specimens, with descriptions of many of which they afterwards enriched the Journal. In 1819 and 1820, the celebrated expedition to the Rocky Mountains took place, the particulars of

which are before the public, so far as to render it unnecessary to enter into details in the present paper, particularly as these are not scientific in their character. His learning, his patient industry, and the confidence reposed in him by all the officers of the detachment, are visible in every page of the narrative; and the large portion which he contributed to the work is acknowledged by the editor. This embraces the whole of his favourite department, the invertebral animals, together with a great variety of additional subjects, to which, from circumstances of various kinds, it was convenient that Mr. Say should direct his attention. In the expedition to the sources of St. Peter's River &c., performed in 1823, at least equal labour, in proportion to the time employed, was bestowed by our late member upon the collection of materials; although a portion of the preparation for the press was saved him by his friend, W. H. Keating, Esq., the editor.

During the period of our narrative, honours from abroad came thick upon him. On these, however, he set but a limited value, except where they were the means of extending or increasing a knowledge of natural history. His correspondence with distinguished foreign naturalists occupied a large portion of his time, although constantly confined to matters of science; and thus superseded much of his domestic letter-writing.

In the year 1825, at the foundation of the celebrated settlement of New Harmony, Mr. Say removed to that place, at the request of his friend William Maclure, Esq. His residence there, as well as that of several other learned men, should not be confounded with the eccentric experiment of which, by the agency of Mr. Robert Owen, the same place was made the theatre. It was for the purpose of constituting a school of natural science under the patronage of our liberal President. By the munificence of that distinguished individual, he enjoyed, in the wilds of the far west, all the advantages of a splendid library, abundant facilities for making collections, and a ready printing press. It is unfortunate, that some of his elaborate papers are not only rendered difficult of access to the scientific world, but exposed to the risk of being separated or destroyed, by their committal to the evanescent pages of the newspaper of the place, the New Harmony Disseminator. To this it may be added, that the columns of that paper suffer under the dislike and disapprobation of all that large portion of the community who stand opposed to the very peculiar doctrines in relation to religion, politics and domestic life, which were introduced to the public through its agency. Owing to these causes, naturalists are deprived of the use of many of the most valuable papers of Mr. Say, which it were to be wished might be republished by some one of

the learned societies which are proud to acknowledge him among their members.

The scientific world is, however, in possession of two volumes, the second and third, of his splendid American Entomology, and of six numbers of his Conchology, all which were among the fruits of his industry while at New Harmony. The volumes of the Entomology were published in Philadelphia—the others in Indiana.

It was while at New Harmony that Mr. Say's domestic happiness was enhanced by his marriage with Miss Lucy W. Sistare, of New York, a lady in every way qualified to add to the felicity of such a man. In addition to many elegant accomplishments, Miss Sistare possessed the advantage of a fondness for the same pursuits, and great readiness and neatness with the pencil; a talent which was employed to the advantage of the beautiful works which we have just named.

Besides the elaborate description of a number of natural objects collected at New Harmony, and also in Mexico, during the tours in that country made by Mr. Maclure, our fellow member found himself, at this late period of life, again involved in the cares of business and the superintendance of property. Amid the chaos of mind which the settlement presented, Mr. Maclure felt the value and necessity of old and tried friendship, tested honour and untiring industry, in the care of his vast estates. In none could he confide with more unhesitating promptitude than in the

subject of our memoir; and he who in early youth had sacrificed his own property to the pursuit of science, was willing, in maturer age, to devote his talents to the care of that of his friend. During the frequent periods of absence, which the state of Mr. Maclure's health or the various scientific objects he had in view rendered necessary, for several years, he left his large property in the care of Mr. Say; a circumstance which materially added to the labours of the latter, and loaded him with a feeling of responsibility to which the middle of his life had been a stranger.

Amid these accumulating tasks and this honourable charge, the termination of his studies was now gradually approaching. The hand of death was busy upon the Wabash. The season was one of unusual mortality; and the ordinary and general causes of disease could only co-operate with the severe and devoted industry of the naturalist. Mr. Say's habits of steady and protracted application, excessive abstinence and loss of sleep, had long before this period exerted an injurious influence upon his health, exhibiting their effects in repeated attacks of fever and dysentery; and when, in 1833, he paid a short visit to his friends in Philadelphia, for the conjoined objects of health and science, the ravages of sickness were but too visible. Still, those who knew him were not conscious that it was then for the last time that he visited his native city, or the walls of his beloved

Academy. He recovered from one attack, however, to be subsequently prostrated by another; and finally, the closing malady appeared on the 20th of September. This is described as a disease commencing with bilious symptoms, and closing with those of typhus fever with a highly nervous character, accompanied with dysentery. On the 8th of that month he appeared to improve; but on the following day his debility increased in an alarming manner; and on the 10th he sunk into the arms of death by an easy dissolution.

Thus perished, while yet in the vigour of his years, an individual on whom creative wisdom appeared to have stamped in the strongest manner the characters of a master mind in the study of the works of God. His last days cannot be said to have passed away without regrets. Declining health and laborious cares had slowly undermined his spirits, a tendency to depression exhibited itself, and he appeared to feel, though surrounded by friendship and munificence, that he had not the independence to which his extraordinary talents and industry entitled him. The narrative is fruitful of instruction; yet the sketch of his scientific and personal character, ought, perhaps, to occupy a larger share of our sheets than we have devoted to it.

The communications of Mr. Say to natural science are numerous and of considerable bulk. We have appended a list of all those we have been able to obtain; with the double object of giving the best view

in our power of their number and variety, and of enabling the future inquirer to find them with more facility. They are scattered through a variety of publications, not all devoted to natural history, and one of these even a newspaper; the student finds it impossible, without considerable exertion, to avoid overlooking some of them; and it is too much to be feared that individual memoirs are irrecoverably lost. Their number will probably surprise even some of his acquaintance. No estimate of their value, and the labour necessary to produce them, can, however, be founded upon their simple bulk; nor can they be compared to others upon such a principle. If we take into view the extreme labour which he uniformly bestowed upon his productions, first, to insure their accuracy, and then to compress them within the smallest possible space, the amount of work executed by this indefatigable writer will appear enormously augmented. But it is not by the rules of arithmetic that the labours of Mr. Say are to be judged in any respect. To form a just idea of the space in public utility occupied by our deceased fellow member, it would be desirable to make an estimate of the vacancies which existed in American science, of the judgment which he formed of them, and of the success of his endeavours to fill them. To do this in an adequate manner would require an extended grasp of the mind. He who attempts it should possess an enlarged and accurate acquaintance with the subject,

the power of forming comprehensive views, and judgment and ability in expressing the results. To this rare combination, the gift of a few leading minds, your reporter fully feels that he possesses no claim ; but it would be committing a disrespect to your nomination, to omit presenting such an outline as he is enabled to prepare.

We have seen that the larger lacunæ in the zoology of our country, embraced, at the time when Mr. Say began his labours, the immense and obscure masses of amphibia, fishes and the invertebral animals. The fishes were principally left to the researches of Dr. S. L. Mitchell and M. Lesueur. The amphibia were passed by till they subsequently attracted the attention of M. Le Conte, Professor Green, Dr. Harlan, and others. It was in the immense range of the invertebrates that Mr. Say exhausted his labours ; and among these it may be said, as of a former writer, that he left scarce any department untouched, and none that he touched unimproved. His descriptions of species are most numerous among the annulosa and the mollusca ; although he also made investigations among the radiata, as appears from the list of his publications, and among the entozoaria. It is not to be supposed, that he exhausted any of these departments : the stores of nature within our country are too extensive, and much doubtless remains for future observers. Yet he described the large and laborious numbers which serve for the general materials of

classification ; he constructed the extended and accurate map, to which the task of making local additions is easy, but which forms the necessary and only guide to those who would make further admeasurements. It is not that there is no more gold in the mine ; but in raising his own ore, Mr. Say has opened the shafts and galleries, pointed out the veins, and indicated, by his example, the best manner of working them. He has laid down the broad masses of colouring, which, however they may be augmented and retouched by the persevering pencil of the future artist, must still form the basis, and in very numerous cases the perfection, of the picture. Every familiar object in these departments, that frequently met the eye, but produced a feeling of dissatisfaction because no description or place for it was to be found in the writers on natural history, received its character from his hands. His task was that of Adam, to name the animals as they passed before him.

His modesty at first induced him to attempt few and isolated species and departments of small extent ; and as time gave him experience of his powers he ventured farther. A few scattered insects and shells, ascertained to be undescribed with great labour and precaution, first received their characters and names from him. Next, he undertook the Crustacea of the United States, which he described and classified. He then extended his labour to a larger number of shells, selecting those of the land and the fresh waters.

Next came the detached and still limited groups of the Thysanouræ, the Arachnides and the Myriapodæ; and then he finally entered among the vast masses of the true insects. His publications in this field of toil principally relate to the Coleoptera, Diptera, Hemiptera, Neuroptera and Hymenoptera. His account of the Neuroptera is liable to be overlooked from the circumstance of its publication in a journal of medicine instead of one devoted to natural history. When the late Dr. Godman published the Western Quarterly Reporter, at Cincinnati, Ohio, he was desirous of enriching his work with contributions on natural science, and was gratified with the receipt of this valuable paper from Mr. Say, without which our large and conspicuous insects of this order would remain undescribed. Our deceased fellow member had now achieved so much of his task that he could afford to be desultory; and his pieces from this period assume a more diversified character. His monograph on the genus *Cicindela* is much admired. His share in the history of the two expeditions by Major Long, is truly multifarious. Besides the departments which he considered peculiarly his own, it embraces, as we have already had occasion to observe, a very large amount of matter foreign to his ordinary habits of study, and requiring a different manner of composition. We may here, without extravagance, admire the talents of the man, who, in a species of writing which for many years it had been his persevering

study to avoid, should please the public with the fluency and ease of diction, which are found in some popular chapters contributed by him. Some of the most interesting portions are those which describe the manners of the Indians. He is the historian of all the facts that were collected in those districts which he traversed with a small detachment of troops under his separate command ; he obtained, although not professing philology, the vocabulary of the Killisteno language ; and on the Expedition to the Sources of St. Peter's River, he made the whole of the botanical collections, which afterwards formed the basis of a memoir appended by the late Mr. De Schweinitz to the published narrative. In fossil zoology, his description of new species of the Crinoidea is considered highly valuable. Some other matter in this department, in which America until lately presented such a mass of unknown objects, will be found in the catalogue of his papers. Our fellow member, Dr. Morton, informs me that he was himself induced to undertake the study of the New Jersey marl fossils, in consequence of the perusal of Mr. Say's paper treating on that subject, in the 1st and 2d volumes of Professor Silliman's Journal. It would seem that his valuable papers on American shells, published in the New Harmony Disseminator, and communicated to me by the politeness of Mr. Poulson, are in reality very little known to naturalists. Some other publications were made by Mr. Say in

that periodical ; it appearing to have been his first object in this as in many other instances, to procure a public record of his papers in print, so as to establish his claims to the date of his discoveries, while at the same time he obtained duplicates to transmit to his learned correspondents ; leaving it to subsequent times to republish them, and thus secure their wider diffusion and more easy access.

The character of Mr. Say was in every way singularly fitted for the task which he thus made the business of his life. He was gifted with a strong intellect, accurate powers of observation, vast assiduity, a freedom from those unsettled wanderings of the mind which are so frequently the bane of genius, and an enthusiastic attachment to the subject of his studies. Such was the ardour of his perseverance, that for a long period he actually lived at the Academy, sleeping within the walls, and only leaving the institution when necessary to obtain his meals. The hours of refreshment were forgotten, and sleep unhesitatingly sacrificed, not as an occasional exertion, but as a permanent and persevering habit. His extraordinary power of concentrating his industry, had an effect in producing the peculiar style of his pieces. The manner of writing in which he most delighted, was that of the utmost abridgment of which the subject was capable, cutting off every unnecessary word. It was not that he was incapable of a fluent style, for various parts of his writings demonstrate the contrary,

such as some of his contributions to the narrative of the Expedition to the Rocky Mountains; but he seemed to think it an injustice to the reader and to science to detain men from knowledge with the smallest redundancy of language. At the same time, this severe judge was far from criticising others with the same rigour which he exercised towards himself; and readily forgave the luxuriance of style in their works. His own manner, when he indulged in his beloved brevity, was certainly liable to the objection of difficulty to untutored readers; but still more, perhaps, to the risk of alarming students by its apparent obscurity, than to the reality, as the knowledge which was requisite was always actually present, though comprised in few words. It is unnecessary to add, that to some profound naturalists this abridged style is a recommendation.

In philosophy he was an advocate for that doctrine which attached exclusive importance to the evidence of the senses. Fact alone was the object which he thought worthy of his researches. Chains of reasoning on general principles he thought so frequently fallacious, as to constitute an employment for the human intellect of secondary and even doubtful utility. We will not here stop to discuss this celebrated opinion. The influence which it has exerted through the minds of Mr. Say and others has contributed sensibly, within the city of Philadelphia, to stimulate our youth to the pursuit of science in preference to that of litera-

ture. It cannot therefore be considered as acting injuriously to this Academy, which should be considered as a great school of observation and inductive science.

The natural temper of our deceased member was one of the most amiable ever met with. The phrase was frequent in the mouths of his intimates, that "it was impossible to quarrel with him." His great respect for his parents, and his compliance with their wishes, have been already mentioned. He was repaid, notwithstanding his retired life and his exclusive devotion to science, by a singular strength of attachment on the part of his friends; and we have already spoken of the confidence of Mr. Maclure. His modesty was so retiring, and the wish which he frequently expressed "to save trouble" to others so great, that to men in the habit of living much in the world they might perhaps appear incredible. The contrast of these with the manners of the times was occasionally so remarkable as almost to amount to eccentricity and satire.

To those who have not seen him, it may be interesting to add, that he was tall, muscular, but spare, apparently endowed, before his health was injured by repeated illness, with considerable strength. This enabled him better to struggle with the fatigues of toilsome journeys and the wasting inactivity of study. His complexion was dark, with black hair.

The best likeness of him is a small one, by Mr. Wood, in the possession of his family.

In closing an account of the life of our deceased founder, it seems consonant with the spirit of our institution to make but little comment. The fact and truth of which it is our habit to be in search, shine with as much clearness and instruction in the contemplation of a life passed in the augmentation of natural science, as they do in any other department of knowledge. The institution which is now lamenting his death, is in a great measure the work of his hands. We can say, as was written of the architect of a splendid temple, “*Si monumenta quæris, circumspice.*”

*Extracts from the constituent Minutes of the Academy of Natural Sciences.*

PHILADELPHIA, Saturday, Jan. 25, 1812.

John Speakman, Esq. having taken the chair, Camillus Macmahon Mann, Doctor of Medicine, was called by the meeting, unanimously, to discharge the duties of secretary.

Present, besides the said Chairman and Secretary,

Gerard Troost, Esq. Med. Doctor, Jacob Gilliams, Esq.

John Shinn, jr., Esq. Nicholas Parmantier, Esq.

Who conjointly have proceeded to initiatory business, as well for themselves, as for Mr. Thomas Say, absent.

Resolve—The gentlemen present agree to form, constitute and become a Society for the purpose of occupying their leisure occasionally, in each other's company, on subjects of natural science, interesting and useful to the country and the world, and in modes conducive to the general and individual satisfaction of the members, as well as to the primary object, the advancement and diffusion of useful, liberal, human knowledge. And the said gentlemen present pledge themselves to the formation and persevering support of this said intended society accordingly.

Determined.

Signed by Thomas Say, Camillus M. Mann, Secretary,

John Speakman, N. I. Parmantier,

G. Troost, J. Gilliams.

PHILADELPHIA, March 17, 1812.

*\*Academy of Natural Sciences.*

Thomas Say, Gerard Troost, Jacob Gilliams, John Speakman, Nicholas Parmantier, John Shinn, jr. and Camillus Macmahon Mann—Present—all the foundation members.

Every individual of the present members, founders of the Academy of Natural Sciences, has equally felt that an association of this nature, tendency, operation and bearing, free and perpetually exclusive of political, religious and national partialities, antipathies, preventions and prejudices, is necessary for the easier and more perfect acquirement and the better progress of natural knowledge, wherever it may be desired.

We will contribute to the formation of a Museum of Natural History, a Library of Works of Science, a Chemical Experimental Laboratory, an Experimental Philosophic Apparatus, and every other desirable appendage or convenience for the illustration and advancement of natural knowledge, and for the common benefit of all the individuals who may be admitted members of our institution in the manner herein to be stated, or stated already.

Camillus M. Mann, Secretary.

Signed by Thomas Say,

N. I. Parmantier,

J. Gilliams,

G. Troost,

John Speakman,

\* The name "Academy of Natural Sciences," was first assumed at this meeting.

LIST OF THE PAPERS AND OTHER WORKS OF  
MR. SAY, SO FAR AS ASCERTAINED.

*Journal of the Academy of Natural Sciences.*

VOL I.

Description of Seven Species of American Fresh Water and Land Shells, not noticed in the systems.

Descriptions of several new species of North American Insects.

Some account of the Insect known by the name of the Hessian Fly, and of a parasitic Insect that feeds on it.

On a new genus of the Crustacea and the species on which it is established.

An account of the Crustacea of the United States.

Descriptions of New Species of Land and Fresh Water Shells of the United States.

Account of two New Genera, and several New Species of Fresh Water and Land Shells.

Notes on Professor Green's paper on the Amphibia.

Observations on some of the Animals described in the Account of the Crustacea of the United States.

Appendix to the Account of the Crustacea.

Description of a New Genus of Fresh Water Bivalve Shells.

Description of three New Species of the Genus Næsa.

VOL. II.

Descriptions of the Thysanouræ of the United States.

Descriptions of the Arachnides of the United States.

Descriptions of the Myriapodæ of the United States.

Descriptions of Univalve Shells of the United States.

Account of some of the Marine Shells of the United States.

Description of a Quadruped belonging to the Order Rodentia.

On a South American species of *Œstrus*, which inhabits the human body.

Descriptions of Univalve Terrestrial and Fluviatile Shells of the United States.

VOL. III.

Descriptions of Dipterous Insects of the United States.

Descriptions of Coleopterous Insects collected in the Expedition to the Rocky Mountains. [229 pages, 356 species. Continued into vol. iv.]

VOL. IV.

Account of some of the Fossil Shells of Maryland.

On the Fresh Water and Land Tortoises of the United States.

Description of three New Species of *Coluber* inhabiting the United States.

On two Genera and several Species of *Crinoidea*.

Descriptions of New Hemipterous Insects collected in the Expedition to the Rocky Mountains.

A New Genus of Mammalia proposed, and a description of the species upon which it is founded. By T. Say and George Ord.

Description of a New Species of Mammalia, whereon a New Genus is proposed to be founded. By T. Say and George Ord.

On a new species of *Modiola*.

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Descriptions of New Species of *Hister* and *Hololepta* inhabiting the United States.

Descriptions of some New Species of Fresh Water and Land Shells of the United States.

On the Species of the Linnæan Genus *Asterias* inhabiting the coast of the United States.

Descriptions of New Species of Coleopterous Insects inhabiting the United States.

Descriptions of Marine Shells recently discovered on the coast of the United States.

On the Species of the Linnæan Genus *Echinus* inhabiting the coast of the United States.

*Descriptions of North American Dipterous Insects.*

*Descriptions of New North American Hemipterous Insects, belonging to the first family of the section Homoptera of Latreille.*

*Contributions of the Maclurian Lyceum of Philadelphia.*

Remarks on some Reptilia of Dr. Harlan.

Note on Le Conte's Coleopterous Insects of North America.

Descriptions of New Species of Hymenoptera of the United States.  
[Not completed.]

*Annals of the Lyceum of Natural History of New York, Vol. I.*

Descriptions of New American Species of the Genora Buprestis,  
Trachys and Elater.

*Western Quarterly Reporter of Medical, Surgical and Natural Science; edited by John D. Godman, M. D., Vol. II.*

Descriptions of Insects belonging to the Order Neuroptera, Linn.,  
Latreille. Collected by the Expedition under the command of Major  
Long, [to the Rocky Mountains.]

*Silliman's Journal, Vol. I.*

Notes on Herpetology.

Observations on some species of Zoophytes, Shells &c. principally  
fossil. [Continued into vol. ii. Contains the first account of New  
Jersey Marl Fossils.]

*Philosophical Transactions of the Royal Society, 1819.*

On the Genus Ocythoe; being an extract of a letter from Thomas  
Say, Esq. of Philadelphia, to Wm. Elford Leach, M. D., F. R. S.

*American Philosophical Transactions, Vol. I. new series.*

A Monograph of North American Insects of the Genus Cicindela.

## VOL. II.

Descriptions of Insects of the families of Carabici and Hydrocanthari of Latreille, inhabiting North America.

## VOL. IV.

Descriptions of New North American Insects, and Observations upon some already described. [Part of this paper was also printed in the New Harmony Disseminator.]

*In the "Account of an Expedition from Pittsburgh to the Rocky Mountains, performed in the years 1819 and 1820."*

The whole department of Zoology; with the addition of various Memoirs, Narratives and Notes, incorporated into the body of the work. Besides what is published, it will be remembered that Mr. Say was robbed of a large mass of collections and papers.

*In the "Narrative of an Expedition to the Source of St. Peter's River, Lake Winnepeek, Lake of the Woods, &c. &c. performed in the year 1823."*

The notes of all that relates to the Zoology and Botany of the country traversed; as well as much of the matter relating to the Indians. Also, the greater part of the Appendix, viz.: the article Zoology, in 124 pages; the specimens and other materials, which enabled Mr. de Schweinitz to compose the article Botany; and the Killisteno portion of the Vocabularies of Indian Languages.

*In the American edition of Nicholson's Encyclopaedia.*

The new modelling of the whole department of Natural History, with the addition of all the American matter, including an extensive account of American Insects and Shells.

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*American Entomology, or Descriptions of the Insects of North America, illustrated by coloured figures from original drawings ex-*

cuted from Nature. Philadelphia Museum. Vol. i. 1824; vol. ii. 1825; vol. iii. 1828; Glossary, 1825.

*American Conchology*, or Descriptions of the Shells of North America, illustrated by coloured figures, from original drawings executed from Nature. Six numbers and a Glossary. New Harmony, Indiana. 1830—1834.

*Descriptions of New Species of Curculionites of North America*, with observations on some of the species already known. New Harmony, Indiana. July, 1831.—Pamphlet.

*In the New Harmony Disseminator, (communicated by C. A. Poulson, Esq.)*

July 29, 1829.—Descriptions of some new Terrestrial and Fluviatile Shells of North America. Continued to Nov. 18th. Nine articles.

Dec. 30.—New Terrestrial and Fluviatile Shells of North America. Continued to Jan. 29. Three articles.

We are informed, that other publications were made by Mr. Say in the journal last named; but of these we have, as yet, been unable to obtain a list.

#### **ERRATUM.**

It is much regretted, that notwithstanding considerable pains, an error of some importance has crept into our manuscript. Owing to the removal of Messrs. Shinn and Parmantier, two of the foundation members, to a distance from Philadelphia, and to the cessation of their labours in the Academy, the death of these gentlemen was not known to the writer in time for an earlier correction.